

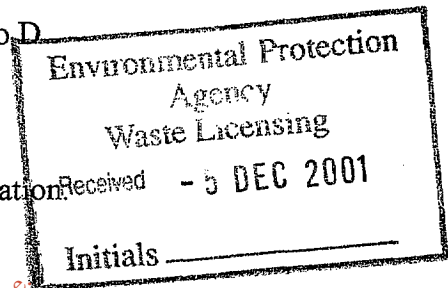
Carranstown Waste Management Facility – Application to the Environmental Protection Agency for a Waste Licence

Introduction:

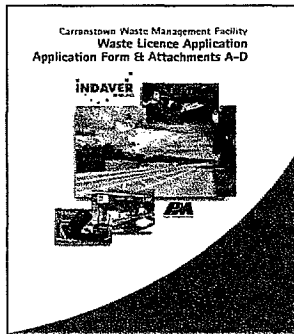
Indaver Ireland are submitting to the Environmental Protection Agency this application for a Waste Licence for a proposed Waste Management Facility at Carranstown, Duleek, Co. Meath.

This licence application consists of five volumes namely:

- Waste Licence Application Form & Attachments A to D
- Waste Licence Application Attachments E to L
- An Environmental Impact Statement
- Environmental Impact Statement –Attachment
- Environmental Impact Statement –Additional Information

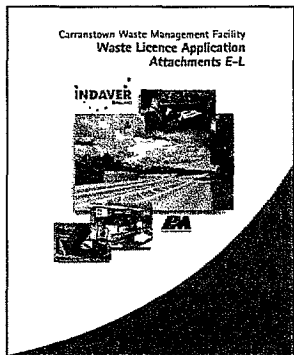


A description of each of these volumes is supplied below:



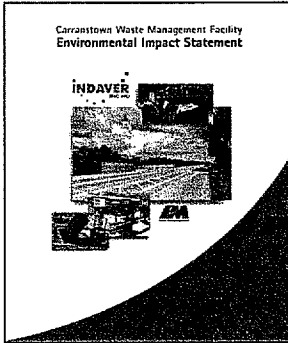
Waste Licence Application Form & Attachments A to D:

This volume consists of the completed application form supplying information such as company details, the type of Recovery/ Disposal activities that are proposed and information regarding what attachments are included with the application. The Attachments in this volume include (A) a non-technical summary of the proposed facility, (B) general application details, (C) details of the existing local environment and (D) Site Design.

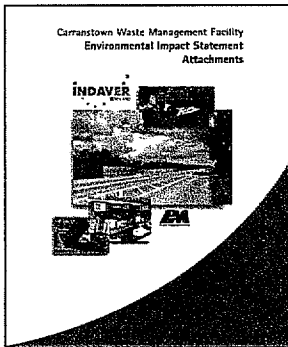


Waste Licence Application Attachments E to L:

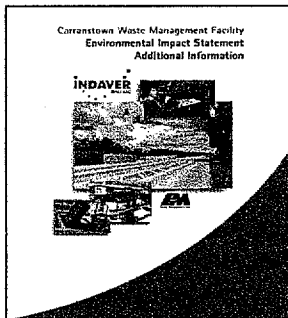
This volume provides details on items such as, (E) Waste Acceptance and Handling, (F) Environmental Control, (G) Decommissioning of the site, (H) Environmental Impacts, (I) Site Management, (J) Environmental Monitoring, (K) Contingency Arrangements and (L) Financial Provision.



Environmental Impact Statement: This volume assesses the impact that the proposed waste management facility will have on the environment. Topics such as air quality, water, noise and traffic are just some of the areas assessed. For each topic an examination of the existing environment is made, this is then compared to the impact the facility will have during the construction phase and finally the operation phase.



Environmental Impact Statement Attachments: This volume contains the reports that were written by consultants during the environmental impact assessment. These reports consist of examinations of the existing environment and calculated predications of the impact the facility will have during the construction and operational phases



Environmental Impact Statement Additional Information: During the application for planning permission, additional information regarding the Environmental Impact Statement was requested by Meath Co. Co. This volume contains a response from Indaver Ireland to this request. Additional information on items such as traffic and noise impacts are included in this volume. Also, details of Indaver's proposals for establishing a Community Liaison Committee and developing environmental awareness within the community are discussed

Volume 1

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VOLUME I
Table of Contents

Completed Waste Licence Application Form

Attachment A1:

Non-Technical Summary

Attachment A1.1 Non-Technical Summary

Attachment B1:

Applicant Details

Attachment B1.1 Applicant Registration Details & List of Applicant Representatives

Attachment B1.2 Official Letter confirming that Indaver Ireland has been registered as a branch of Indaver NV

Attachment B1.3 Certificate of Incorporation

Attachment B1.4 Figure B1.1: Applicants Ownership Details

Attachment B2:

Location of Activity

Attachment B2.1 Figure B2.1: Ordnance Survey Map showing Site Boundary

Attachment B2.2 Figure B2.2: Site Location Map

Attachment B3:

Planning Authority

Attachment B3.1 Notification of Decision to Grant Planning Permission by Meath County Council, Planning Ref. No. 01/4014

Attachment B3.2 Copy of Indaver Ireland Appeal's to an Bord Pleanala

Attachment B4:

Sanitary Authority

There are no attachments because there will be no discharge of trade effluent to a sewer of the sanitary authority.

Attachment B5:

Relevant Planning Authority

Attachment B5.1 Drawing No. 2666-22-DR-007: Location of Site Notices

Attachment B5.2 Text of Site Notice

Attachment B5.3 Copy of Newspaper Advertisement

Attachment B5.4 Copy of Letter to Local Authority

Attachment B6:

Type of Activity:

Attachment B6.1 Type of Activity: Principal Activity and other Activities on site

Attachment B7:

Fees

Fees of £15,000 apply to this application and is made up of £5,000 for waste recovery activities and £10,000 for waste disposal activities. There are no attachments.

**Attachment B8:
Quantity and Nature of Wastes**

Attachment B8.1 Quantity and Nature of Wastes

**Attachment B9:
Major Industrial Hazard Regulations**

Attachment B9.1 Confirmation of Non-applicability of Seveso Regulations (SI No. 476 of 2000) to Waste Management Facility

Attachment C1:

Air

There are no attachments.

The existing air quality is described in detail in Sections 4.1 and 4.2 of the Environmental Impact Statement (EIS) accompanying this licence application. Copies of the Ambient Air Quality Monitoring Report (TMS Environment Ltd., October 2000) and Baseline Dioxin Level Survey (ASEP, September 2000) are included in Attachments 4 and 3 respectively of the EIS.

A three month PM₁₀ baseline study will be carried out at the site, the results of which will be forwarded to the EPA when available.

Attachment C2:

Climate

Attachment C2.1 Existing Climate

Attachment C2.2 Climatic Data for Dublin Airport, Annaskeagh Waterworks, Dundalk and other locations in Co. Meath

Attachment C3:

Cultural Heritage

Attachment C3.1 Existing Cultural Heritage

A copy of the Archaeological Impact Assessment for the Proposed Development at Carranstown, Co. Meath (Archaeological Development Services Ltd., May 2000) is included in Attachment 11 of the Environmental Impact Statement (EIS) accompanying this licence application.

Attachment C4:

Ecology

Attachment C4.1 Existing Ecological Environment

A copy of the Assessment of Impact on Flora and Fauna by Proposed Development at Carranstown, Co. Meath (Biosphere Environmental Services, June 2000) is included in Attachment 10 of the Environmental Impact Statement (EIS) accompanying this licence application.

Attachment C5:

Human Beings

Attachment C5.1 Existing Human Environment

Attachment C5.2 Figure C5.1: Aerial Photograph showing Adjacent Land Uses

Attachment C6:**Hydrogeology**

- Attachment C6.1 Existing Hydrogeology
Attachment C6.2 Additional Hydrogeological Works Undertaken (KT Cullen & Co. Ltd., July 2001)
Attachment C6.3 Completed Waste Licence Application Tables 1.5 (Groundwater Quality) and 1.12 (Site Investigations)

A copy of the Soil and Hydrogeological Investigation (KT Cullen & Co. Ltd., July 2000) is included in Attachment 9 of the Environmental Impact Statement (EIS) accompanying this licence application.

Attachment C7:**Landscape**

- Attachment C7.1 Drawing No. 2666-22-DR-017: Existing Topographical Survey as per requirements in Guidance Notes from EPA
Attachment C7.2 Figure C7.1: Aerial Photograph showing Land Uses as per requirements in Guidance Notes from EPA

The existing landscape is described in detail in Sections 6.1 and 6.2 of the Environmental Impact Statement (EIS) accompanying this licence application. A copy of the Visual Impact Assessment Report (Wilson Associates, October 2000) is included in Attachment 7 of the EIS.

Attachment C8:**Noise**

- Attachment C8.1 Additional Baseline Noise Survey (Project Management Ltd., March 2001)
Attachment C8.2 Completed Waste Licence Application Table 1.8 (Noise Monitoring)

The existing noise environment is described in detail in Section 5.2 of the Environmental Impact Statement (EIS) accompanying this licence application and Section 2.9.1 of the EIS Additional Information.

A copy of the Baseline Noise Study at Carranstown, Co. Meath (Eanna O'Kelly & Associates, Consultant Acoustic Engineers, July 2000) is included in Attachment 6 of the EIS.

Attachment C9:**Surface Water**

- Attachment C9.1 Figure C9.1: Map showing the surface water catchment, surface water bodies and surface water supplies in the vicinity of the proposed site

The existing surface water environment is described in detail in Section 9.2 of the Environmental Impact Statement (EIS) accompanying this licence application and Section 2.3 of Attachment 9 of the EIS.

**Attachment D1:
Infrastructure**

Attachment D1.1	Description of Site Infrastructure
Attachment D1.2	Drawing No. 2666-49-DR-004: Site Entrance Details
Attachment D1.3	Drawing No. 2666-49-DR-005: Site Entrance Details with Power Plant Entrance shown
Attachment D1.4	Drawing No. 2666-22-DR-020: Location of Waste Quarantine and Waste Acceptance Areas
Attachment D1.5	Drawing No. 2666-22-DR-012: Proposed Site Drainage Layout
Attachment D1.6	Drawing No. 2666-22-DR-010: Proposed Site Paving Layout
Attachment D1.7	Drawing No. 2666-22-DR-002: Layout of Community Recycling Park

**Attachment D2:
Facility Operation**

Attachment D2.1	Description of Unit Operations
Attachment D2.2	Drawing No. 2666-22-DR-006: Site Layout Plan
Attachment D2.3	Drawing No. 2666-22-DR-002: Layout of Community Recycling Park
Attachment D2.4	Drawing No. 2666-22-DR-019: Materials Recycling Facility Schematic
Attachment D2.5	Drawing No. 2666-22-DR-008: Layout of Main Plant
Attachment D2.6	Drawing No. 2666-22-DR-018: Waste to Energy Plant Schematic

**Attachment D3:
Materials Management**

Attachment D3.1	Materials Management
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VOLUME II
Table of Contents

Attachment E1:

Existing Waste Types and Quantities

As this is a new waste management facility and therefore there is no existing waste, this attachment is not applicable.

Attachment E2:

Proposed Waste Types and Quantities

Proposed Waste Types and Quantities

Attachments E3 and E4:

Waste Acceptance and Handling Procedures

Attachment E3.1	Facility Opening Times
Attachment E3.2	Summary of Indaver Ireland Environmental and Quality Management Systems
Attachment E3.3	Draft Procedure for Waste Acceptance at Carranstown Waste Management Facility
Attachment E4.1	Draft Waste Handling Procedure for the Waste to Energy Plant
Attachment E4.2	Draft Waste Handling Procedure for the Materials Recycling Facility

Attachment E5:

Raw Materials and Energy

Attachment E5.1	Raw Materials and Energy
Attachment E5.2	Completed Waste Licence Application Table 1.10 (Raw Materials, Intermediates, Products, etc.)

Attachment E6:

Plant:

Attachment E6.1	Plant Requirements
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Attachment F1:

Aerosol Control

Attachment F1.1	Aerosol Control
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Attachment F2:

Bird Control

Attachment F2.1	Bird Control
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Attachment F3:

Dust Control

Attachment F3.1	Dust Control
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Attachment F4:

Fire Control

Attachment F4.1	Fire Control
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Attachment F5:

Litter Control

Attachment F5.1 Litter Control

Attachment F6:

Odour Control

Attachment F6.1 Odour Control

Attachment F7:

Roads Cleansing

Attachment F7.1 Road Cleansing

Attachment F8:

Traffic Control

Attachment F8.1 Traffic Control

Copies of the Traffic Impact Assessment Report (Atkins Mc Carthy, January 2001) and the Traffic Impact Assessment – Further Information Report (Atkins Mc Carthy, June 2001) are included in Attachment 8 of the EIS and Attachment B of the EIS Additional Information respectively.

Attachment F9:

Vermin Control

Attachment F9.1 Vermin Control

Attachment G1:

Decommissioning

Attachment G1.1 Decommissioning

Attachment G2:

Aftercare Management Plan

Due to the nature of this facility (i.e. as no materials will be stored or landfilled on site) there will be no emissions from this facility after cessation of activities and decommissioning, an aftercare management plan will not be required and therefore this attachment is not applicable.

Attachment H1:

Air

Attachment H1.1 Impact on Air Quality
Attachment H1.2 Air Dispersion Modelling Report for EPA Waste Licence Application, AWN Consulting Ltd, November 2001
Attachment H1.3 Modelling of PCDD/F Inhalation in vicinity of Proposed Waste to Energy Facility and Comparison with PCDD/F Intake for Milk Report, AWN Consulting Ltd, November 2001
Attachment H1.4 Drawing No. 2666-22-DR-009: Location of Air Emission Points
Attachment H1.5 Completed Waste Licence Application Tables 1.1 (Air Emissions), 1.2 (Air Emissions Characterisation) and 1.4 (Emissions Abatement)

Attachment H2:**Climate**

Attachment H2.1 Impact on Climate

Attachment H3:**Cultural Heritage**

The impact on cultural heritage is described in detail in Sections 12.3, 12.4 and 12.5 of the Environmental Impact Statement (EIS) accompanying this licence application and therefore there is no attachment.

Attachment H4:**Ecology**

Attachment H4.1 Impact on Ecology

Attachment H5:**Human Beings**

Attachment H5.1 Impact on Human Beings

Attachment H6:**Hydrogeology**

Attachment H6.1 Impact on Hydrogeology
Attachment H6.2 Drawing No. 2666-22-DR-013: Location of Effluent Treatment System and Percolation Area
Attachment H6.3 Pamphlet on Puraflo
Attachment H6.4 Completed Waste Licence Application Table 1.6 (Groundwater Emissions)

Attachment H7:**Landscape**

There are no attachments.
The visual impact is described in detail in Sections 6.3, 6.4 and 6.5 and Attachment 7 of the Environmental Impact Statement (EIS) accompanying this licence application.

Attachment H8:**Ecology**

Attachment H8.1 Environmental Impact of Noise Emissions
Attachment H8.2 Drawing No. 2666-22-DR-014: Location of Noise Emission Points
Attachment H8.3 Completed Waste Licence Application Table 1.7 (Noise Emissions)

Attachment H9:**Discharge to Surface Water**

Attachment H9.1 Discharge to Surface Water
Attachment H9.2 Drawing No. 2666-22-DR-012: Proposed Site Drainage Layout
Attachment H9.3 Drawing No. 2666-22-DR-010: Proposed Site Paving Layout
Attachment H9.4 Drawing No. 2666-22-DR-011: Location of Surface Water Discharge Point

Attachment H9.5 Completed Waste Licence Application Table 1.14 (Surface Water Emissions)

Attachment H10:

Discharge to Sewer

Attachment H10.1 Discharge to Sewer

Attachment H11:

Wastes Arising

Attachment H11.1 Wastes Arising
Attachment H11.2 Federal Work Group on Waste (LAGA) Standard
Attachment H11.3 German DIN S4 Standard, DIN 38 414
Attachment H11.4 Typical Analyses of Boiler Ash and Flue Gas Cleaning Residues from a similar Indaver Facility in Belgium
Attachment H11.5 Drawing No. 2666-22-DR-021: Location of Ash/Gypsum Storage

Attachment I1:

Conditioning Plan

As this waste management facility is a new facility, this attachment is not applicable.

Attachment I2:

Environmental Management System

Attachment I2.1 Introduction to Indaver Ireland Environmental and Quality Management Systems
Attachment I2.2 Index of Environmental and Quality Management System Procedures
Attachment I2.3 Indaver Ireland Document Control Procedure
Attachment I2.4 Indaver Ireland Document Amendment Procedure
Attachment I2.5 Indaver Ireland Internal Audit Procedure
Attachment I2.6 Indaver Ireland Non-conformance Procedure

Attachment J1:

Monitoring

Attachment J1.1 Proposed Environmental Monitoring Programme
Attachment J1.2 AMESA Dioxin/furan Monitoring System Brochure
Attachment J1.3 Drawing No. 2666-22-DR-015: Location of Monitoring Points
Attachment J1.4 Figure J1.1: Locations of Noise Sensitive Receptors (ANN1, ANN2 and ANN3) and Odour Monitoring Points

Attachment K1:

Contingency Arrangements

Attachment K1.1 Contingency Arrangements

Attachment L1:

Offences and Convictions

Neither Indaver Ireland or MinChem Environmental Services Ltd. have even been convicted of any offence under the Waste Management Act, 1996 as amended or any other environmental legislation and therefore this attachment is not applicable.

Attachment L2:

Technical Competence and Site Management

- Attachment L2.1 Technical Competence and Site Management
- Attachment L2.2 Indaver Ireland Training and Staff Competence Procedure and Training Matrix
- Attachment L2.3 Indaver Ireland Environmental Policy
- Attachment L2.4 Indaver Ireland Safety Policy
- Attachment L2.5 Indaver Ireland Quality Policy

Attachment L3:

Financial Provision

- Attachment L3.1 Financial Provision

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Completed Waste Licence Application Form

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